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- (d) The characteristics listed in accordance with paragraph (c) of this section shall be classified according to the potential effect of such defect and grouped in to the following classes:
- (1) Critical. A defect that judgment and experience indicate is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the product; or a defect that judgment and experience indicate is likely to prevent performance of the function of the end product.
- (2) *Major.* A defect, other than critical that is likely to result in failure, or to reduce materially the usability of the unit or product for its intended purpose.
- (3) Minor. A defect that is not likely to materially reduce the utility of the instrument for its intended purpose, or a defect that is a departure from established standards and has little bearing on the effective use or operation of the instrument.
- (e) The quality control inspection test method to be used by the applicant or his agent for each characteristic required to be tested shall be described in detail.
- (f) Each item manufactured shall be 100 percent inspected for defects in all critical characteristics and all defective items shall be rejected.
- (g) The Acceptable Quality Level (AQL) for each major or minor defect so classified by the applicant shall be:
 - Major—1.0 percent;
 - (2) Minor—4.0 percent.
- (h) Except as provided in paragraph (i) of this section, inspection level II as described in MIL-STD-105D, or inspection level IV as described in MIL-STD-414, shall be used for major and minor characteristics and 100 percent inspection for critical characteristics.
- (i) Subject to the approval of MSHA, where the quality control plan provisions for raw material, processes, manufacturing, and fabrication inspection are adequate to ensure control of finished article quality, destructive testing may be conducted at a lower level of inspection than that specified in paragraph (h) of this section.

[37 FR 7565, Apr. 15, 1972, as amended at 43 FR 12316, Mar. 24, 1978]

§ 29.42 Proposed quality control plans; approval by MSHA.

(a) Each proposed quality control plan submitted in accordance with this subpart shall be reviewed by MSHA to determine its effectiveness in ensuring the utility of the instrument for which

an approval is sought.

- (b) If MSHA determines that the proposed quality control plan submitted by the applicant will not insure adequate quality control, MSHA shall require the applicant to modify the procedures and testing requirements of the plan prior to approval of the plan and issuance of any certificate of approval.
- (c) Approved quality control plans shall constitute a part of and be incorporated into any certificate of approval issued by MSHA, and compliance with such plans by the applicant shall be a condition of approval.

§ 29.43 Quality control records; review by MSHA; revocation of approval.

- (a) The applicant shall keep quality control inspection records sufficient to carry out the procedures required in MIL-STD-105D or MIL-STD-414, or an approved equivalent sampling procedure.
- (b) MSHA reserves the right to have its representatives inspect the applicant's quality control test methods, equipment, and records, and to interview any employee or agent of the applicant in regard to quality control test methods, equipment, and records.
- (c) MSHA reserves the right to revoke, or cause, any certificate of approval where it finds that the applicant's quality control test methods, equipment, or records do not ensure effective quality control over the instrument for which the approval was issued.

Subpart F—General Construction and Performance Requirements

§ 29.50 Construction and performance requirements; general.

(a) MSHA shall issue approvals for portable coal dust/rock dust analyzers and continuous duty, warning light, portable methane detectors which have met the applicable minimum requirements set forth in this Part 29.